



WAYS OF USING DIGITAL TECHNOLOGIES IN THE STATE ASSET MANAGEMENT SYSTEM

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Annotation: The authors examine the current state of asset management and identify areas where digital technologies can be integrated to improve efficiency and effectiveness. They also explore the potential benefits of using digital technologies, including increased transparency, improved accuracy, and reduced administrative costs. The article suggests that the use of digital technologies can help streamline asset management processes and provide better monitoring of asset performance. Finally, the authors provide recommendations for the adoption and implementation of digital technologies in the state asset management system. The article is a useful resource for policymakers and asset managers interested in improving the management of state assets through the application of digital technologies.

Keywords: digital technologies, state asset management, efficiency, transparency, accuracy, administrative costs, asset performance, adoption, implementation.

Introduction: State asset management is a critical function for governments as it involves the management of public assets, which are essential to the delivery of public services and the achievement of government objectives. The effective management of state assets requires a comprehensive and integrated approach that ensures that assets are utilized efficiently, maintained effectively, and generate value for money. To achieve this, governments need to have accurate and up-to-date information on the status and performance of assets, which can be challenging given the size and complexity of state asset portfolios.

The advent of digital technologies has provided governments with new opportunities to manage state assets more effectively and efficiently. Digital technologies have the potential to revolutionize the management of state assets by providing real-time information on asset performance, enhancing transparency, and reducing administrative costs. However, the adoption of digital technologies in state asset management has been slow, and many governments are yet to fully harness the potential of these technologies.

This article examines the ways in which digital technologies can be used in state asset management to improve efficiency, transparency, and accuracy. The article explores the potential benefits of digital technologies in state asset management and identifies the challenges that governments may face when adopting and implementing these technologies. Finally, the article provides recommendations for the adoption and implementation of digital technologies in the state asset management system.

Background

State asset management involves the management of a range of assets, including infrastructure, property, and equipment, that are owned by the government. These assets are used to deliver essential public services such as transportation, healthcare, education, and

public safety. The effective management of state assets is crucial as it ensures that public services are delivered efficiently and effectively, and that government objectives are met.

State asset management is a complex process that involves a range of activities, including asset planning, acquisition, maintenance, and disposal. Asset planning involves identifying the assets required to deliver public services and determining the most cost-effective way of acquiring and maintaining them. Asset acquisition involves procuring assets through purchase, lease, or construction. Asset maintenance involves ensuring that assets are kept in good condition and are able to deliver the required level of service. Finally, asset disposal involves selling, scrapping, or repurposing assets that are no longer required.

Traditionally, state asset management has been a manual process, with asset managers relying on spreadsheets, paper-based systems, and manual data entry to manage assets. However, this approach can be time-consuming and error-prone, and it can result in inaccurate and outdated asset information. The adoption of digital technologies in state asset management can help overcome these challenges by providing real-time information on asset performance, enhancing transparency, and reducing administrative costs.

Benefits of Using Digital Technologies in State Asset Management

The adoption of digital technologies in state asset management can provide a range of benefits, including improved efficiency, accuracy, and transparency. Digital technologies can help streamline asset management processes, provide real-time information on asset performance, and enable asset managers to make informed decisions about the allocation of resources. Below are some of the key benefits of using digital technologies in state asset management.

Improved Efficiency

Digital technologies can help improve the efficiency of state asset management by automating routine tasks and reducing administrative costs. For example, digital technologies can be used to automate the collection of data on asset performance, which can save time and reduce errors. Digital technologies can also be used to automate the process of asset inventorying, which can help ensure that asset records are up-to-date and accurate.

Improved Accuracy

Digital technologies can help improve the accuracy of state asset management by providing real-time information on asset performance. This can enable asset managers to make informed decisions about the maintenance and replacement of assets. Digital technologies can also be used to automate the process of asset inspection, which can help ensure that assets are maintained to the required standard.

Furthermore, digital technologies have the potential to improve the efficiency and transparency of asset management systems in the public sector. As the public sector is responsible for managing large amounts of assets, ranging from infrastructure to land, efficient asset management can lead to significant cost savings and improved service delivery to citizens. However, the adoption of digital technologies in the public sector has been slower compared to the private sector, and many government agencies still rely on outdated manual systems.

In recent years, there has been a growing interest in using digital technologies in the state asset management system. The use of digital technologies can help overcome the limitations of manual systems and improve the accuracy, efficiency, and transparency of the asset



management process. Moreover, digital technologies can also enable better data management and analysis, which can help in making informed decisions about asset management.

This paper aims to explore the ways in which digital technologies can be used in the state asset management system. The paper will begin by discussing the current state of asset management in the public sector and the challenges associated with it. The paper will then explore the various digital technologies that can be used in the state asset management system and their benefits. Finally, the paper will discuss some case studies of successful implementation of digital technologies in the state asset management system and the lessons learned.

Related research

Several studies have been conducted on the use of digital technologies in asset management systems, both in the public and private sectors. One study conducted by the World Bank (2019) found that the adoption of digital technologies can lead to significant improvements in asset management systems in the public sector, such as increased transparency and accountability, reduced costs, and improved service delivery. The study also highlighted the importance of investing in digital infrastructure and skills development to ensure successful adoption and implementation of digital technologies.

Another study by the Organization for Economic Cooperation and Development (OECD, 2019) examined the use of digital technologies in public asset management across different countries. The study found that countries that have successfully adopted digital technologies in their asset management systems have seen improvements in data management, decision-making, and overall efficiency. The study also identified several challenges in implementing digital technologies, such as the need for collaboration between different government agencies and the importance of ensuring data privacy and security.

A study by Deloitte (2019) explored the use of emerging technologies, such as blockchain and artificial intelligence, in asset management in the private sector. The study found that these technologies have the potential to transform the asset management process by improving efficiency, reducing costs, and enhancing transparency. However, the study also highlighted the importance of addressing ethical and regulatory issues associated with these technologies. These studies highlight the potential benefits of adopting digital technologies in asset management systems, but also the challenges and risks involved in implementing these technologies. The findings of these studies can inform the development of strategies and policies for the adoption and implementation of digital technologies in state asset management systems.

Analysis and results

As the use of digital technologies in asset management systems continues to grow, there are several key trends that have emerged. One trend is the use of data analytics and visualization tools to improve decision-making. These tools allow asset managers to analyze large volumes of data quickly and identify trends, patterns, and outliers. This helps to identify potential risks and opportunities, which can inform decision-making and improve the overall management of assets.

Another trend is the use of mobile and cloud-based technologies to improve access to data and information. Mobile technologies enable asset managers to access asset data and information from anywhere at any time, which can improve the efficiency and speed of asset



management. Cloud-based technologies also enable asset managers to store and share data securely and efficiently, which can improve collaboration and communication between different government agencies.

The adoption of emerging technologies such as blockchain and artificial intelligence (AI) is also increasing in asset management systems. Blockchain technology can help to improve transparency and traceability in asset transactions, while AI can be used to automate routine tasks and improve decision-making. These technologies can help to reduce costs and improve efficiency, but they also require significant investment in infrastructure and skills development.

Several case studies have demonstrated the successful implementation of digital technologies in state asset management systems. For example, the government of Singapore has implemented a centralized asset management system that uses data analytics and visualization tools to improve decision-making and transparency. The system also enables different government agencies to share asset data and information, which has improved collaboration and communication.

Similarly, the government of New Zealand has implemented a cloud-based asset management system that enables asset managers to access asset data and information from anywhere at any time. The system has improved the efficiency and speed of asset management and reduced costs associated with maintaining physical infrastructure.

The analysis shows that the use of digital technologies in state asset management systems has the potential to improve efficiency, accuracy, and transparency, and to achieve better outcomes for citizens. However, the adoption and implementation of digital technologies require significant investment in infrastructure and skills development, and there are also ethical and regulatory issues that need to be addressed.

Methodology

The methodology used in this article involves a systematic review of literature on the ways of using digital technologies in the state asset management system. The literature was collected through online databases such as Google Scholar, IEEE Xplore, and ACM Digital Library, as well as relevant government reports and case studies.

The articles and reports were analyzed and synthesized to identify key trends and best practices in the use of digital technologies in state asset management systems. The analysis focused on the benefits and challenges of adopting digital technologies, as well as the specific tools and techniques that have been successfully implemented in different government agencies.

The case studies were selected based on their relevance and availability of data. The analysis of the case studies involved an in-depth examination of the specific digital technologies and tools that were implemented, as well as the outcomes and impacts of these implementations. The analysis also identified any challenges or limitations that were encountered and how they were addressed.

The methodology involved a critical review of the literature, which helped to identify gaps and limitations in the current research. These gaps were used to suggest areas for future research and development in the field of state asset management systems and digital technologies.

Conclusion

In conclusion, the use of digital technologies in state asset management systems has the potential to improve efficiency, accuracy, and transparency in asset management. The analysis

of the literature and case studies identified several key trends, including the use of data analytics and visualization tools, mobile and cloud-based technologies, and emerging technologies such as blockchain and AI.

The case studies demonstrate that the successful implementation of digital technologies in state asset management systems requires a significant investment in infrastructure and skills development. However, the benefits of improved efficiency, transparency, and cost savings are significant and can lead to better outcomes for citizens.

To realize the full potential of digital technologies in state asset management systems, it is important to address ethical and regulatory issues such as data privacy and security. It is also necessary to continue research and development in the field to address the gaps and limitations identified in the literature.

The analysis suggests that the use of digital technologies in state asset management systems will continue to grow, and governments that adopt these technologies will be better positioned to manage their assets effectively and efficiently.

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